

## WHAT IS CLAIMED IS:

1. A pharmaceutical combination comprising:
  - a) a first agent selected from the group consisting of 5-HT<sub>4</sub> receptor agonists or antagonists, 5-HT<sub>4</sub> receptor partial agonists and 5-HT<sub>3</sub> receptor antagonists; and
  - b) a co-agent.
2. The pharmaceutical combination of claim 1 wherein the first agent and the co-agent include pharmaceutically acceptable salts, racemates or enantiomers thereof.
3. The pharmaceutical combination of claim 1 wherein the first agent is selected from the group consisting of compounds of formula I, tegaserod, cisapride, nor-cisapride, renzapride, zacopride, mosapride, prucalopride, SB 205149, SC 53116, RS 67333, RS 67506, BIMU 1, BIMU 8 and (S)-RS 56532.
4. The pharmaceutical combination of claim 1 wherein the first agent is tegaserod.
5. The pharmaceutical combination of claim 1 wherein the first agent is the compounds of formula I.
6. A pharmaceutical composition comprising the pharmaceutical combination of claim 2 and a pharmaceutically acceptable carrier.
7. The pharmaceutical composition of claim 6 wherein the co-agent is selected from the group consisting of 5-HT<sub>3</sub> receptor antagonists, 5-HT<sub>4</sub> receptor agonists or antagonists, compounds which show characteristics of 5-HT<sub>3</sub> receptor antagonists and 5-HT<sub>4</sub> receptor agonists or antagonists, H<sub>2</sub> antagonists, PPIs, anxiolytics, benzodiazepine compounds, anti-spasmodic/anti-muscarinic agents, SSRIs, tricyclic antidepressants, selegeline, belladonna alkaloids, M<sub>1</sub> antagonists, metoclopramide, CCK receptor antagonists, kappa opioid agonists or antagonists, motilin receptor agonists or antagonists, nitric oxide synthase inhibitors, BIMU compounds, GABA<sub>B</sub> receptor agonists or modulators, NK receptor

agonists or antagonists, substance P agonists or antagonists, calcitonin gene-related peptide receptor agonists or antagonists, endorphin/enkephalin analogs, anti-inflammatory compounds, stimulant laxatives, osmotic laxatives, fecal softeners, absorbents and fiber supplements, antacids, GI relaxants, loperamide, diphenoxylate, anti-gas compounds, bismuth-containing preparations, subsalicylate, pentosan polysulfate, hydroxyzine, dextromethorphans, mast cell stabilizers and anti-emetic dopamine D<sub>2</sub> antagonists.

8. The pharmaceutical composition of claim 7 wherein the 5-HT<sub>4</sub> receptor antagonists are selected from the group consisting of A-85380, SB 204070, SB 207266, SB 207058, SB 207710, SB 205800, SB 203186, N 3389, FK 1052, SC 56184, SC 53606, DAU 6285, GR 125487, GR 113808, RS 23597, RS 39604, RS 100235, LY0353433 and R 59595.
9. The pharmaceutical composition of claim 7 wherein the 5-HT<sub>4</sub> receptor agonists are selected from the group consisting of mosapride and prucalopride.
10. The pharmaceutical composition of claim 7 wherein the 5-HT<sub>3</sub> receptor antagonists are selected from the group consisting of cilansetron, ramosetron, azasetron, ondansetron, granisetron, tropisetron and alosetron.
11. The pharmaceutical composition of claim 7 wherein the compounds which show characteristics of 5-HT<sub>3</sub> receptor antagonists and 5-HT<sub>4</sub> receptor agonists or antagonists are selected from the group consisting of cisapride, nor-cisapride, SDZ 205-557 and BIMU compounds.
12. The pharmaceutical composition of claim 11 wherein the BIMU compounds are selected from the group consisting of BIMU1, BIMU8, DAU 6215, and DAU-6258 .
13. The pharmaceutical composition of claim 7 wherein the H<sub>2</sub> antagonists are selected from the group consisting of famotidine, cimetidine, nizatidine and

ranitidine.

14. The pharmaceutical composition of claim 7 wherein the PPIs are irreversible PPIs selected from the group consisting of omeprazole, rabeprazole, pantoprazole, esomeprazole and lansoprazole.
15. The pharmaceutical composition of claim 7 wherein the PPIs are reversible PPIs selected from the group consisting of BY 841, SKF 97574, SKF 96067, H 40502, BY 112, YH1238 and YH1885.
16. The pharmaceutical composition of claim 7 wherein the PPIs are pre PPIs.
17. The pharmaceutical composition of claim 7 wherein the anti-emetic dopamine D<sub>2</sub> antagonist is domperidone.
18. The pharmaceutical composition of claim 7 wherein the benzodiazepine compounds or analogs are selected from the group consisting of LIBRIUM®, ZANAX®, DIASTAT® and VALIUM®.
19. The pharmaceutical composition of claim 7 wherein the anti-spasmodic/anti-muscarinic agents are selected from the group consisting of dicyclomine, darifenacin and hyoscyamine.
20. The pharmaceutical composition of claim 7 wherein the SSRIs are selected from the group consisting of fluvoxamine, fluoxetine, paroxetine, sertraline, citalopram, venlafaxine, cericlamine, duloxetine, milnacipran, nefazodone, and cyanodothiepin.
21. The pharmaceutical composition of claim 7 wherein the tricyclic anti-depressants are selected from the group consisting of amitriptyline, sinequan and bupropion.
22. The pharmaceutical composition of claim 7 wherein the belladonna alkaloids are selected from the group consisting of atropine and scopolamine.
23. The pharmaceutical composition of claim 7 wherein the CCK receptor

antagonists are selected from the group consisting of devasepide, lorglumide, loxiglumide, dexloxiglumide, CI 988, L364,718, L363,260, L740,093 and LY288,513.

24. The pharmaceutical composition of claim 7 wherein the kappa opioid agonist or antagonist is fedotozine.
25. The pharmaceutical composition of claim 7 wherein the motilin receptor agonists or antagonists are selected from the group consisting of ABT-269, (erythromycin, 8,9-didehydro-N-dimethyl-9-deoxo-4",6,12-trideoxy-6,9-epoxy-N-ethyl), de(N-methyl-N-ethyl-8,9-anhydroerythromycin A and de(N-methyl)-N-isoprop-8,9-anhydroerythromycin A, A-173508, (Phe3, Leu13) porcine motilin and ANQ-11125.
26. The pharmaceutical composition of claim 7 wherein the CGRP receptor antagonist is CGRP-(8-37):
27. The pharmaceutical composition of claim 7 wherein the anti-inflammatory compounds are selected from the group consisting of NSAIDS, immunomodulatory drugs, TNF inhibitors, basiliximab, daclizumab, infliximab, mycophenolate mofeil, azathioprine, tacrolimus, steroids, sulfasalazine, olsalazine and mesalamine.
28. The pharmaceutical composition of claim 7 wherein the stimulant laxatives are selected from the group consisting of bisacodyl and EX -LAX®.
29. The pharmaceutical composition of claim 7 wherein the osmotic laxatives are selected from the group consisting of sorbitol and phosphate buffered saline.
30. The pharmaceutical composition of claim 7 wherein the fecal softener is senna concentrate.
31. The pharmaceutical composition of claim 7 wherein the absorbents and fiber supplements are selected from the group consisting of bulk fiber laxative plus natural vegetable stimulants and bulk forming natural

therapeutic fiber.

32. The pharmaceutical composition of claim 7 wherein the antacids are selected from the group consisting of aluminum antacids, magnesium antacids and calcium hydroxides.
33. The pharmaceutical composition of claim 7 wherein the GI relaxant is cholestyramine resin.
34. The pharmaceutical composition of claim 7 wherein the anti-gas compounds are selected from the group consisting of simethicone and enzyme preps.
35. The pharmaceutical composition of claim 7 wherein the bismuth containing preparations is bismuth subsalicylate.
36. The pharmaceutical composition of claim 7 wherein the GABA<sub>B</sub> receptor agonists or modulators are selected from the group consisting of (±)-baclofen, S(-)-baclofen, R(+)-baclofen, CGP44532, CGP47656, CGP7930, SK&F97541.
37. The pharmaceutical composition of claim 7 wherein the NK antagonist compounds are selected from the group consisting of FK 888; GR 205171; LY 303870; MK 869; GR82334; L758298; L 733060; L 741671; L 742694; PD 154075; S18523; S19752; OT 7100; WIN 51708; NKP-608A, TKA457, DNK333, CP-96345, CP-99994, CP122721, L-733060, L-741671, L-742694, L-758298, L-754030, GR-203040, GR-205171, RP-67580, RPR-100893; RPR-107880, RPR-111905, FK-888, SDZ-NKT-343, MEN-10930, MEN-11149, S-18523, S-19752, PD-154075; SR-140333, LY-303870, EP-00652218, EP-00585913, L-737488, CGP-49823, WIN-51708, SR-48968, SR-144190, YM-383336, ZD-7944, MEN-10627, GR-159897, RPR-106145, PD-147714, ZM-253270, FK-224, MDL-105212A, MDL-105172A, L-743986, L-743986 analogs, S-16474, SR-142801, PD-161182, SB-223412, and SB-222200.

38. A process for preparing the pharmaceutical composition of claim 6 comprising combining a therapeutically effective amount of a first agent and a co-agent, or the pharmaceutically effective salts, racemates or enantiomers thereof, with a pharmaceutically acceptable carrier.
39. The process of claim 38 wherein the first agent is tegaserod.
40. A method of treating a patient suffering from a gastrointestinal altered motility, sensitivity and secretion disorder comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to a patient in need thereof.
41. The method of claim 40 wherein the gastrointestinal altered motility, sensitivity and secretion disorder is selected from the group consisting of heartburn, bloating, abdominal pain and discomfort, early satiety, epigastric pain, nausea, vomiting, regurgitation, chronic constipation, diabetic gastroparesis, dyspepsia, gastro-esophageal reflux disease, irritable bowel syndrome, ulcerative colitis, Crohn's disease, spastic cystitis, interstitial cystitis, post-operative ileus, intestinal pseudoobstruction, anal incontinence and ulcers and visceral pain associated therewith.
42. A method of treating a patient suffering from an abdominal viscera disorder comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to a patient in need thereof.
43. The method of claim 42 wherein the abdominal viscera disorder is selected from the group consisting of those conditions treated by regulation, stabilization and normalization of enterochromaffin cell secretory, pain and motility mechanisms, afferent fiber activity and GI and lower abdominal smooth muscle cells.
44. The method of claim 40 wherein the pharmaceutical composition is administered once or twice daily in oral dosage form.
45. The method of claim 44 wherein the pharmaceutical composition is administered in fast-melt dosage form.

46. A method of facilitating the evacuation of the small and large intestine comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to a patient in need thereof.
47. A method of preparing a patient for colonoscopy comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to the patient.
48. A method of regulating and stabilizing enterochromaffin cell secretory, pain and motility mechanisms comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to a patient in need thereof.
49. A method of regulating and stabilizing afferent fiber activity comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to a patient in need thereof.
50. A method of regulating, stabilizing and normalizing GI and lower abdominal smooth muscle cells comprising administering a therapeutically effective amount of the pharmaceutical composition of claim 6 to a patient in need thereof.
51. A method of treating GERD comprising administering the pharmaceutical composition of claim 6 wherein the co-agent is selected from the group consisting of 5-HT<sub>3</sub> receptor antagonists, 5-HT<sub>4</sub> receptor agonists or antagonists, H<sub>2</sub> antagonists, PPIs and anti-gas compounds.
52. A method of treating dyspepsia comprising administering the pharmaceutical composition of claim 6 wherein the co-agent is selected from the group consisting of 5-HT<sub>3</sub> receptor antagonists, 5-HT<sub>4</sub> receptor agonists or antagonists, H<sub>2</sub> antagonists and anti-gas compounds.
53. A method of treating IBS comprising administering the pharmaceutical composition of claim 6 wherein the co-agent is selected from the group consisting of 5-HT<sub>3</sub> receptor antagonists, 5-HT<sub>4</sub> receptor agonists or antagonists, BIMU compounds, anxiolytics, anti-spasmodic/anti-muscarinic agents, SSRIs, M<sub>1</sub> antagonists, metoclopramide, CCK

antagonists, NK antagonists, motilin receptor agonists or antagonists, amitriptyline, bupropion, belladonna alkaloids, endorphin/enkephalin analogs and anti-inflammatory compounds.

54. The pharmaceutical composition of claim 7 wherein the mast cell stabilizer is ketotifen.